Transportation Hubs
Airport Security - New Challenges

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Airport Security New Challenges

- Threat – Terrorist Groups
- New Challenges - Coordinated Attacks
- Risk – Transportation Hubs
- Vulnerability - Critical Infrastructure
- Communications networks - Overloaded
- Lack of Communications Between Airport Entities And Other Government Agencies.
- Lack of Trust in Governments To Protect Civilians.
- Shutdown of Transportation Center – Days to Weeks
- Loss Of Revenue for City As Well as Airlines, Hotels, Tourist Destinations
- City in Lockdown While Police and Security Agencies Located Escaped Terrorists or Supporters.
# Terrorist Related Incidents

<table>
<thead>
<tr>
<th>Date</th>
<th>Deaths</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970s</td>
<td>244</td>
<td>180</td>
</tr>
<tr>
<td>1980s</td>
<td>657</td>
<td>303</td>
</tr>
<tr>
<td>1990s</td>
<td>1,049</td>
<td>7,757+</td>
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<tr>
<td>2000</td>
<td>38</td>
<td>44</td>
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<tr>
<td>2001</td>
<td>4,687</td>
<td>13,500+</td>
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<tr>
<td>2002</td>
<td>821</td>
<td>2,897+</td>
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<tr>
<td>2003</td>
<td>418</td>
<td>2,321+</td>
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<tr>
<td>2004</td>
<td>1,066</td>
<td>4,016+</td>
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<tr>
<td>2005</td>
<td>348</td>
<td>1,857+</td>
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<tr>
<td>2006</td>
<td>319</td>
<td>981</td>
</tr>
<tr>
<td>2007</td>
<td>~621</td>
<td>~1,730</td>
</tr>
<tr>
<td>2008</td>
<td>350+</td>
<td>362+</td>
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<tr>
<td>2009</td>
<td>58</td>
<td>87+</td>
</tr>
<tr>
<td>2010</td>
<td>673+</td>
<td>&gt;1,794</td>
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<tr>
<td>2011</td>
<td>717+</td>
<td>1,757+</td>
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<tr>
<td>2012</td>
<td>788+</td>
<td>2,378+</td>
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<tr>
<td>2013</td>
<td>768+</td>
<td>1,839+</td>
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<tr>
<td>2014</td>
<td>2,120+</td>
<td>1,046+</td>
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<tr>
<td>2015</td>
<td>3,097+</td>
<td>3,383+</td>
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<tr>
<td>2016</td>
<td>1,326+</td>
<td>2,620+</td>
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<td><strong>Totals:</strong></td>
<td>20,165+</td>
<td>50,852+</td>
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COORDINATED ATTACKS

- Madrid Train Station Coordinated Attack
- First Responders Overwhelmed
- Hospitals Not Prepared for Casualties
- Police Response
- Shut Down the City
- Waiting for Further Explosions

March 2004 Madrid, Spain
AIRPORT SUPPORT FACILITIES

• Data Centers Located Near Explosion.
• Buildings Demolished Data Lost.
• 30% of Heathrow Fuel Supply Provided by Facility.
• Airport Began Rationing of Aviation Fuel.

December 2005 Buncefield, Hertfordshire, England
COORDINATED ATTACKS ON TRANSPORTATION CENTERS

- Coordinated / Swarm Attack
- First Responders Overwhelmed
- Hospitals Not Prepared for Casualties
- Police Response
- Shut Down the City
- Waiting for Further Explosions
- Swarm Attack to overwhelm security and first responders.

November 2008 Mumbai, India
AIRLINE BOMBINGS

- Bombing on Russian Airline Bound for St. Petersburg.
- 224 Deaths, No Survivors
- Sharm Al Sheik Airport is 3rd Largest Egyptian Airport.
- All Air Carriers Suspended Operations From Airport Until Security Review
- Aircrew Complained of Aircraft Mechanical Problems

October 2015 Sharm El Sheikh Airport, Egypt
COORDINATED ATTACKS

November 2015 Paris, France

- Coordinated Attack
- 137 Killed, 368 Wounded.
- First Responders Overwhelmed
- Hospitals Not Prepared for Casualties
- Police Response
- Shut Down the City
- Waiting for Further Explosions
COORDINATED ATTACKS

- Coordinated Attack on Terminal and Surrounding Area.
- 11 Suicide Bombers and Terrorist Penetrated Airfield And Holed Up In A Converted School
- 70+ Deaths, 35 Injured. 11 Terrorists
- Attack Was Coordinated After Message To Osama Posted On Taliban Website

December 2015 Kandahar Airport, Afghanistan
20 Minutes after takeoff from Mogadishu, explosion detonated in Daalos Airlines, Airbus A321 opening a hole in the fuselage behind the R2 door.

Crew turned the plane around and successfully performed an emergency landing at Mogadishu.

2 injuries and the body of the bomber were found on the ground in Somalia along the flight path.
Car bomb kills 6 people just outside the Mogadishu airport near a checkpoint at the entrance to the airport complex.

Car bomb was targeting an UN convoy transiting the checkpoint.

Explosives were remotely exploded in front of a tea shop just outside the airport near a checkpoint at the entrance to the airport complex.

February 2016 Car Bomb Near Airport, Mogadishu, Somalia
Laptop bomb explodes at an airport checkpoint in Beledweyne, Somalia. The Laptop bomb wounded 6 people.

A laptop packed with explosives at the front gate of the airport, as the security officers were trying to inspect a car carrying the devices,

The screening area is used to inspect cargo and baggage before entering into the airport complex and being put on planes.

Two other devices were defused, one hidden in a printer.

March 2016 Laptop Bomb, Beledweyne Airport, Somalia
COORDINATED ATTACKS ON TRANSPORTATION CENTERS

- Coordinated Attack On Airport 07:58
  Metro 09:11
- First Responders
  Communications
  Circuits
  Overwhelmed
- Hospitals Not
  Prepared for
  Casualties
- Police Response
- Shut Down the City
- Waiting for Further
  Explosions

March 2016 Brussels, Belgium
COORDINATED ATTACKS

June 2016 Ataturk Airport, Turkey

- Coordinated Shooting and Suicide Bombing at Terminal 2.
- 45 Deaths, 230 Injured.
- Hospitals Not Prepared for Casualties
- Police Response
- Shut Down the City
- Waiting for Further Explosions

Three men entered the international arrivals area and opened fire before detonating suicide vests.

Eyewitnesses say that at least one attacker was on the first floor, in check-in area.

Guardian graphic
Airport Security Solutions

- GSM Cell Towers Can Be Shut Down to prevent Terrorist from using them.
- Tracing of phone calls from suspect terrorist to other members.
- Use of CCTV with Video Analytics To Assist With Forensics
- Use of Face Recognition Software To Identify Suspects.
- Cooperation Between ICAO Signatories In Sharing Information Between Airports.
- Baggage Screening, for Contraband, Bombs, Chemical & Radiation,
- Deterrent Against Drones That Interrupt Aircraft, Microwave Bursts, Electronic Jamming, Anti-Drones With Nets, Birds Of Prey.
- Better Coordination And Communication Between Government Agencies.
Discussion & Questions

Thank You